

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

690 Walnut Ave. St. 150

Vallejo, CA 94592-1133

(707) 649-5453

(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-002282**Date Inspected:** 09-May-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1400**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 400**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Jiang Jian Fei, Xu Le Feng**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Caltrans Tower**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Ken Jobes, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, to randomly monitor welding and Quality Control (QC) functions. While on site, the QA Inspector observed and/or discovered the following:

New Tower Bay 2

The QA Inspector randomly observed the ultrasonic inspection (UT) of Weld No. ESD1-SA77A/E-43A by ZPMC UT technician, Xue Hai Yong, who accepted the weld and marked acceptance adjacent to the weld. See attached pictures.

The Caltrans QA Inspector randomly observed the Submerged Arc Welding (SAW) of cap pass on Weld No. ESD1-SA233 A/F-21B in the flat groove (1G) welding position. The welding operator was Xia Yong Liu (I. D. No. 048882) and the Welding Procedure Specification (WPS) No. was WPS-B-T-2221-B-U3c-S. Certified Welding Inspector (CWI), Jiang Jian Fei was present during this welding. The QA Inspector verified the qualifications of the welding operator, and that the electrode/flux classification, diameter of electrode, amperage, voltage, travel speed, and preheat/interpass temperatures were as specified on the WPS.

New Tower Bay 1

The Caltrans QA Inspector also randomly observed the Submerged Arc Welding (SAW) of fill passes on Weld No. ESD1-SA179 D/E-10A in the flat groove (1G) welding position. The welding operator was Chen Hung Xia (I. D.

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No. 040460) and the Welding Procedure Specification (WPS) No. was WPS-B-T-2221-B-U3c-S. Certified Welding Inspector (CWI), Xu Le Feng (CWI No. 07031411) was present during this welding. The QA Inspector verified the qualifications of the welding operator, and that the electrode/flux classification, diameter of electrode, amperage, voltage, travel speed, and preheat/interpass temperatures were as specified on the WPS.

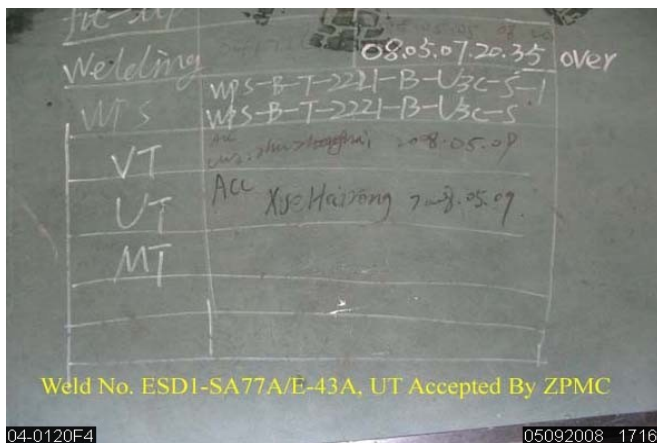
The QA Inspector also randomly observed the Flux Cored Arc Welding (FCAW) in the flat welding position 1G) on Weld Repair No. T-WR036. The welder was Bai Wei Ming (I. D. No. 040434) and the WPS No. was WPS-345-FCAW-1G(1F) Repair. Certified Welding Inspector (CWI), Xu Le Feng was present during this welding. See attached pictures.

The Caltrans QA Inspector also randomly observed the Submerged Arc Welding (SAW) of fill passes on Weld No. SSD1-SA173 B/K-7A in the flat groove (1G) welding position. The welding operator was Xu Xia Shui (I. D. No. 040489) and the Welding Procedure Specification (WPS) No. was WPS-B-T-2221-B-U3c-S. The Caltrans QA Inspector also randomly observed the Submerged Arc Welding (SAW) of the root pass on Weld No. SSD1-SA173 B/K-7B in the flat groove (1G) welding position. The welding operator was Yun Jun Xian (I. D. No. 0503060) and the Welding Procedure Specification (WPS) No. was WPS-B-T-2221-B-U3c-S-1. Certified Welding Inspector (CWI), Xu Le Feng (CWI No. 07031411) was present during the welding of both welds. The QA Inspector verified the qualifications of the welding operator, and that the electrode/flux classification, diameter of electrode, amperage, voltage, travel speed, and preheat/interpass temperatures were as specified on the applicable WPS.

All above observations appeared to meet the requirements of the job specifications.

OBG Shop No. 1

The QA Inspector also randomly observed the visual weld quality of Deck Panel No. DP-437-001, Weld 1 (Rib Nos. U387 and U360); and Weld No. 10 (Rib Nos. U386 and U263) for compliance to AWS D1.5 and the Special Provisions. ABF had previously marked discontinuities for correction. The QA Inspector reviewed those markings and marked additional areas of incomplete fusion, undercut and underfill and documented the results on Caltrans QA Visual Weld Inspection Report for the OBG Deck Panels.



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Summary of Conversations:

As identified within the contents of this report.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Jobes, Kenneth	Quality Assurance Inspector
Reviewed By:	Cochran, Jim	QA Reviewer
